Load tables
Hoesch isowand vario®

Info 2.5.5 GB

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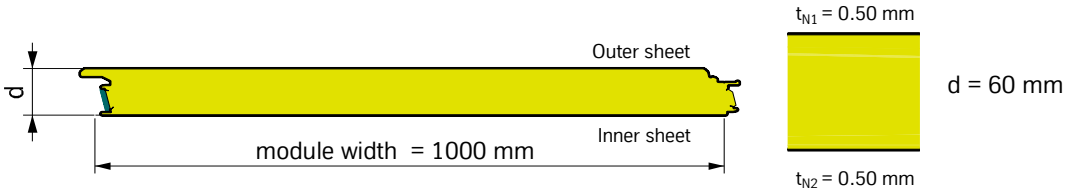
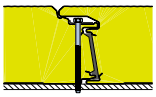
Load tables "permissible q, wind" for preliminary design

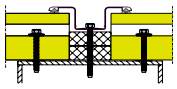
- horizontal installation -



Type of fixing



End support: screw with washer d=19 mm additionally fixed with aluminum strip
characteristic tensile force Fz,k(b_A) = 4.0 kN



Intermediate support: screw with load distributor
characteristic tensile force Fz,k(b_B) = 5.09 kN

The connection load distributor / supporting structure must be calculated separately!

Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	Color Group	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
winter	all	-40 °C

The tables do not replace the structural analysis required for execution of the constructional work. The permissible wind loads in specified [kN/m²] have been determined in accordance with the provisions of official approval no. Z-10.4-345 issued by the German building inspection authorities. The load tables contain both load and material safety factors.

Please note the maximum length supplied, especially in the case of multi-span girders.

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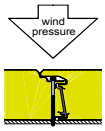

Load tables for **wind pressure**

Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40				
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18				
$b_A \leq 60$ [mm]	60	60	60	60	60	60	59	53	48	43	40	40	40	40	40	40	40	40	40				
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.42	1.17	0.98	0.82	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18				
$b_A \leq 80$ [mm]	74	74	74	74	72	65	59	53	48	43	40	40	40	40	40	40	40	40	40				
CG I-III	3.55	3.04	2.66	2.37	2.08	1.71	1.42	1.17	0.98	0.82	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18				

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.38	1.16	1.00	0.89	0.80	0.73	0.68	0.63	0.60	0.56	0.53	0.50	0.43	0.37	0.32	0.29	0.25	0.23	0.20	0.18	0.17	0.15	0.14
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.72	0.60	0.50	0.43	0.37	0.32	0.29	0.25	0.23	0.20	0.18	0.17	0.15	0.14
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	75	66	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 80$ [mm]	63	62	63	63	62	62	59	50	43	40	40	40	40	40	40								
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.41	1.10	0.88	0.72	0.60	0.50	0.43	0.37	0.32								
$b_B \leq 125$ [mm]	125	125	125	125	125	125	117	99	85	75	66	60	60	60	60								

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.35	0.32	0.29	0.27	0.25	0.23
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.60	0.53	0.48	0.43	0.39	0.35	0.32	0.29	0.27	0.25	0.23
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	80	75	70	66	62	60	60	60	60	60	60	60
$b_A \leq 80$ [mm]	63	62	62	62	62	63	63	58	52	48	44	41	40	40	40	40	40	40	40	40	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.29	1.08	0.92	0.79	0.69	0.60	0.53	0.48	0.43	0.39	0.35	0.32	0.29	0.27	0.25	0.23
$b_B \leq 125$ [mm]	125	125	125	125	125	125	125	117	105	96	88	81	75	70	66	62	60	60	60	60	60	60	60

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.66	0.57	0.50	0.45	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	77	71	66	62	60	60	60	60	60	60	60	60
$b_A \leq 80$ [mm]	62	63	63	63	63	62	63	58	51	46	42	40	40	40	40	40	40	40	40	40	40	40	40
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.28	1.06	0.89	0.76	0.66	0.57	0.50	0.45	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
$b_B \leq 125$ [mm]	125	125	125	125	125	125	125	115	103	93	85	77	71	66	62	60	60	60	60	60	60	60	60

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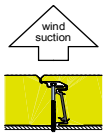
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I-III	2.67	2.29	2.00	1.78	1.60	1.45	1.29	1.10	0.95	0.83	0.73	0.64	0.57	0.46	0.37	0.29	0.23	0.17	0.13				

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.54	1.30	1.12	0.98	0.87	0.79	0.72	0.66	0.61	0.56	0.53	0.49	0.47	0.44	0.42	0.40	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.54	1.30	1.12	0.98	0.87	0.79	0.72	0.66	0.61	0.56	0.53	0.49	0.47	0.44	0.42	0.40	0.38	0.35	0.32	0.29	0.26	0.23	0.21
CG III	1.54	1.30	1.12	0.98	0.87	0.79	0.72	0.66	0.61	0.55	0.41	0.32	0.25	0.19	0.15								

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.59	1.36	1.18	1.05	0.94	0.85	0.78	0.72	0.67	0.62	0.58	0.55	0.52	0.49	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.59	1.36	1.18	1.05	0.94	0.85	0.78	0.72	0.67	0.62	0.58	0.55	0.52	0.49	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG III	1.59	1.36	1.18	1.05	0.94	0.85	0.78	0.72	0.67	0.62	0.58	0.55	0.49	0.43	0.38	0.33	0.29	0.26	0.24	0.21	0.20	0.18	0.17

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.61	1.37	1.19	1.05	0.94	0.85	0.78	0.71	0.66	0.61	0.57	0.54	0.51	0.48	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.61	1.37	1.19	1.05	0.94	0.85	0.78	0.71	0.66	0.61	0.57	0.54	0.51	0.48	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG III	1.61	1.37	1.19	1.05	0.94	0.85	0.78	0.71	0.66	0.61	0.57	0.54	0.45	0.39	0.34	0.29	0.26	0.23	0.20	0.18	0.16	0.14	0.13

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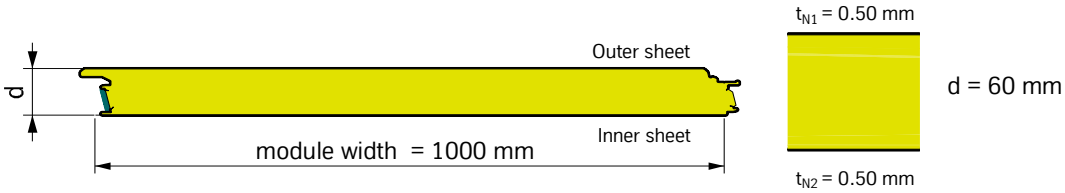
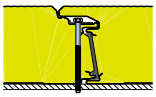
Load tables "permissible q, wind" for preliminary design

- horizontal installation -



Type of fixing



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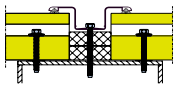
characteristic tensile force Fz,k(b_A) = 4.0 kN



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characteristic tensile force Fz,k(b_B) = 5.0 kN

The connection load distributor / supporting structure must be calculated separately!

Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	Color Group	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
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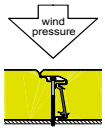
Please note the maximum length supplied, especially in the case of multi-span girders.

Load tables for **wind pressure**



Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.47	0.41	0.36	0.32	0.28	0.24
$b_A \leq$ 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	59	54	49	45	41	40	40	40	40	40	40
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.44	1.33	1.24	1.15	1.08	1.02	0.94	0.81	0.71	0.62	0.54	0.47	0.41	0.36	0.32	0.28	0.24
$b_A \leq$ 80 [mm]	80	80	80	80	80	80	80	80	78	73	68	64	59	54	49	45	41	40	40	40	40	40	40
CG I-III	3.85	3.29	2.88	2.56	2.31	2.09	1.92	1.78	1.61	1.40	1.23	1.09	0.94	0.81	0.71	0.62	0.54	0.47	0.41	0.36	0.32	0.28	0.24

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.34	1.10	0.94	0.83	0.74	0.68	0.63	0.58	0.55	0.52	0.49	0.47	0.45	0.43	0.41	0.40	0.37	0.33	0.29	0.27	0.24	0.22	0.20
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.14	1.04	0.95	0.88	0.82	0.77	0.72	0.68	0.64	0.56	0.48	0.42	0.37	0.33	0.29	0.27	0.24	0.22	0.20
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	74	68	63	60	60	60	60	60	60	60
$b_A \leq$ 80 [mm]	62	62	63	62	62	63	63	63	63	58	51	45	41	40	40	40	40						
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.12	0.92	0.77	0.65	0.56	0.48	0.42	0.37						
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	116	102	91	81	74	68	63	60						

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.48	0.44	0.40	0.37	0.34	0.31
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	73	69	66	63	61
$b_A \leq$ 80 [mm]	62	63	63	62	62	63	63	62	63	63	62	57	53	49	46	43	41	40	40	40	40	40	40
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.11	0.96	0.84	0.74	0.66	0.59	0.53	0.48	0.44	0.40	0.37	0.34	0.31
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	124	114	105	98	92	86	81	77	73	69	66	63	61

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.31	0.29
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.50	0.45	0.41	0.37	0.34	0.31	0.29
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	72	68	64	61	60	60
$b_A \leq$ 80 [mm]	62	62	63	62	62	63	62	62	63	62	61	56	51	47	44	41	40	40	40	40	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.09	0.94	0.82	0.71	0.63	0.56	0.50	0.45	0.41	0.37	0.34	0.31	0.29
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	122	111	102	94	88	82	77	72	68	64	61	60	60

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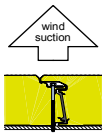
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I-III	2.67	2.29	2.00	1.78	1.60	1.45	1.33	1.23	1.14	1.07	0.97	0.86	0.77	0.69	0.62	0.56	0.51	0.47	0.43	0.40	0.34	0.28	0.24

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.53	1.29	1.12	0.98	0.87	0.78	0.71	0.65	0.60	0.56	0.52	0.49	0.46	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29
CG II	1.53	1.29	1.12	0.98	0.87	0.78	0.71	0.65	0.60	0.56	0.52	0.49	0.46	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29
CG III	1.53	1.28	1.08	0.94	0.84	0.76	0.70	0.65	0.60	0.56	0.52	0.49	0.46	0.36	0.29	0.23	0.19						

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.58	1.34	1.17	1.03	0.93	0.84	0.77	0.71	0.66	0.61	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.40	0.38	0.36	0.35	0.34	0.32
CG II	1.58	1.34	1.17	1.03	0.93	0.84	0.77	0.71	0.66	0.61	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.40	0.38	0.36	0.35	0.34	0.32
CG III	1.58	1.34	1.17	1.03	0.93	0.84	0.77	0.71	0.66	0.61	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.38	0.34	0.30	0.28	0.25	0.23

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.59	1.35	1.18	1.04	0.93	0.84	0.77	0.71	0.65	0.61	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG II	1.59	1.35	1.18	1.04	0.93	0.84	0.77	0.71	0.65	0.61	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG III	1.59	1.35	1.18	1.04	0.93	0.84	0.77	0.71	0.65	0.61	0.57	0.53	0.50	0.47	0.45	0.43	0.38	0.34	0.30	0.27	0.24	0.21	0.19

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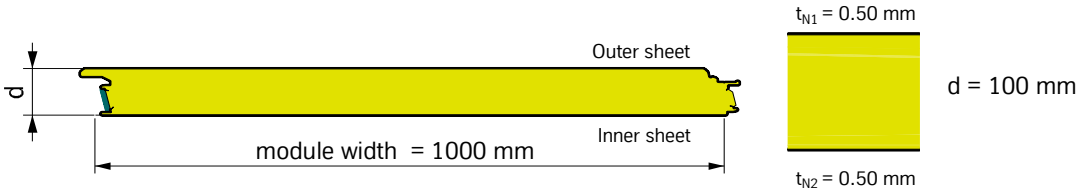
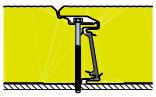
Load tables "permissible q, wind" for preliminary design

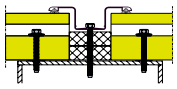
- horizontal installation -



Type of fixing



End support: screw with washer d=19 mm additionally fixed with aluminum strip
characteristic tensile force Fz,k(b_A) = 4.0 kN



Intermediate support: screw with load distributor
characteristic tensile force Fz,k(b_B) = 4.9 kN

The connection load distributor / supporting structure must be calculated separately!

Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

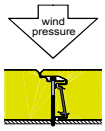
Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	Color Group	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
winter	all	-40 °C

The tables do not replace the structural analysis required for execution of the constructional work. The permissible wind loads in specified [kN/m²] have been determined in accordance with the provisions of official approval no. Z-10.4-345 issued by the German building inspection authorities. The load tables contain both load and material safety factors.

Please note the maximum length supplied, especially in the case of multi-span girders.

Load tables for **wind pressure**



Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.41
$b_A \leq 60$ [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	57	53	49	46	42
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.44	1.33	1.24	1.15	1.08	1.02	0.96	0.91	0.87	0.82	0.79	0.75	0.69	0.61	0.54	0.49	0.44
$b_A \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	80	77	73	70	66	63	60	57	53	49	46	42
CG I-III	3.85	3.29	2.88	2.56	2.31	2.09	1.92	1.77	1.65	1.54	1.44	1.36	1.24	1.11	1.00	0.91	0.83	0.76	0.69	0.61	0.54	0.49	0.44

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.29	1.05	0.88	0.77	0.69	0.62	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.40	0.38	0.37	0.35	0.34	0.33	0.32	0.31	0.29	0.26
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.64	1.40	1.22	1.09	0.98	0.90	0.84	0.78	0.73	0.69	0.66	0.62	0.60	0.57	0.55	0.50	0.44	0.39	0.35	0.32	0.29	0.26
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	72	68	64	61	60	60
$b_A \leq 80$ [mm]	62	63	63	63	63	63	62	63	62	62	63	62	56	50	46	42	40	40	40	40	40	40	
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	0.90	0.77	0.66	0.57	0.50	0.44	0.39	0.35	0.32	0.29	
$b_B \leq 125$ [mm]	125	125	125	125	125	125	125	125	125	125	125	125	112	101	91	83	77	72	68	64	61	60	

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.40
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77
$b_A \leq 80$ [mm]	63	62	62	63	62	63	62	63	62	62	63	62	63	63	59	55	52	49	47	44	42	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	1.00	0.95	0.85	0.76	0.68	0.62	0.56	0.51	0.47	0.43	0.40
$b_B \leq 125$ [mm]	125	125	125	125	125	125	125	125	125	125	125	125	125	125	118	111	104	98	93	89	85	81	77

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq 60$ [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.40	0.37
$b_B \leq 80$ [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	79	75	72
$b_A \leq 80$ [mm]	62	62	62	63	62	63	63	62	62	62	63	62	63	62	57	53	50	47	44	42	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	1.00	0.94	0.83	0.73	0.65	0.59	0.53	0.48	0.44	0.40	0.37
$b_B \leq 125$ [mm]	125	125	125	125	125	125	125	125	125	125	125	125	125	124	115	107	100	94	88	84	79	75	72

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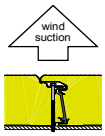
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I-III	2.67	2.29	2.00	1.78	1.60	1.45	1.33	1.23	1.14	1.07	1.00	0.94	0.89	0.84	0.78	0.71	0.64	0.59	0.54	0.50	0.46	0.43	0.40

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.52	1.28	1.11	0.97	0.86	0.78	0.71	0.65	0.60	0.55	0.52	0.48	0.45	0.43	0.41	0.39	0.37	0.35	0.34	0.32	0.31	0.30	0.29
CG II	1.52	1.28	1.11	0.97	0.86	0.78	0.71	0.65	0.60	0.55	0.52	0.48	0.45	0.43	0.41	0.39	0.37	0.35	0.34	0.32	0.31	0.30	0.29
CG III	1.46	1.17	0.98	0.84	0.74	0.67	0.61	0.57	0.53	0.50	0.48	0.46	0.44	0.42	0.41	0.39	0.35	0.29	0.24	0.20	0.17	0.14	

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.55	1.32	1.15	1.02	0.91	0.83	0.76	0.70	0.65	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG II	1.55	1.32	1.15	1.02	0.91	0.83	0.76	0.70	0.65	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG III	1.55	1.32	1.15	1.02	0.91	0.83	0.76	0.70	0.65	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.56	1.33	1.16	1.02	0.92	0.83	0.76	0.70	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.31
CG II	1.56	1.33	1.16	1.02	0.92	0.83	0.76	0.70	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.31
CG III	1.56	1.33	1.16	1.02	0.92	0.83	0.76	0.70	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.29

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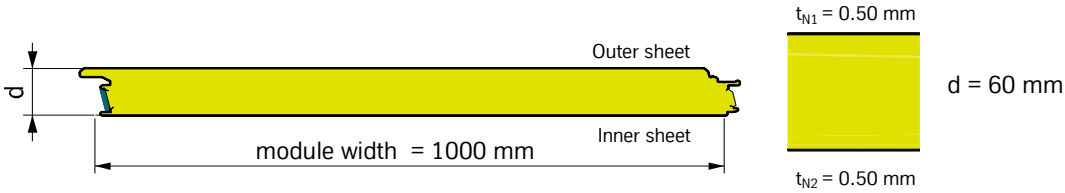
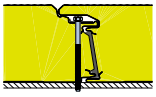
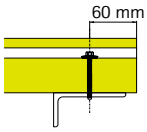
Load tables "permissible q, wind" for preliminary design



Type of fixing



End support: screw with washer d=19 mm
characteristic tensile force Fz,k(b_A) = 2.36 kN



Intermediate support: screw with load distributor
characteristic tensile force Fz,k(b_B) = 5.09 kN

The connection load distributor / supporting structure must be calculated separately!

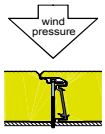
Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	**C**olor **G**roup	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
winter	all	-40 °C

The tables do not replace the structural analysis required for execution of the constructional work. The permissible wind loads in specified [kN/m²] have been determined in accordance with the provisions of official approval no. Z-10.4-345 issued by the German building inspection authorities. The load tables contain both load and material safety factors.

Please note the maximum length supplied, especially in the case of multi-span girders.



Load tables for **wind pressure**

Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18	0.15	0.13	0.11	
$b_A \leq$ 60 [mm]	60	60	60	60	60	60	59	53	48	43	40	40	40	40	40	40	40	40	40	40	40	40	
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.42	1.17	0.98	0.82	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18	0.15	0.13	0.11	
$b_A \leq$ 80 [mm]	74	74	74	74	72	65	59	53	48	43	40	40	40	40	40	40	40	40	40	40	40	40	
CG I-III	3.55	3.04	2.66	2.37	2.08	1.71	1.42	1.17	0.98	0.82	0.69	0.58	0.49	0.41	0.35	0.29	0.25	0.21	0.18	0.15	0.13	0.11	

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.38	1.16	1.00	0.89	0.80	0.73	0.68	0.63	0.60	0.56	0.53	0.50	0.43	0.37	0.32	0.29	0.25	0.23	0.20	0.18	0.17	0.15	0.14
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.72	0.60	0.50	0.43	0.37	0.32	0.29	0.25	0.23	0.20	0.18	0.17	0.15	0.14
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	75	66	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 80 [mm]	63	62	63	63	62	62	59	50	43	40	40	40	40	40	40								
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.41	1.10	0.88	0.72	0.60	0.50	0.43	0.37	0.32								
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	117	99	85	75	66	60	60	60	60								

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.35	0.32	0.29	0.27	0.25	0.23
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.60	0.53	0.48	0.43	0.39	0.35	0.32	0.29	0.27	0.25	0.23
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	75	70	66	62	60	60	60	60	60	60	60
$b_A \leq$ 80 [mm]	63	62	62	62	62	63	63	58	52	48	44	41	40	40	40	40	40	40	40	40	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.29	1.08	0.92	0.79	0.69	0.60	0.53	0.48	0.43	0.39	0.35	0.32	0.29	0.27	0.25	0.23
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	117	105	96	88	81	75	70	66	62	60	60	60	60	60	60	60

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.66	0.57	0.50	0.45	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	77	71	66	62	60	60	60	60	60	60	60	60
$b_A \leq$ 80 [mm]	62	63	63	63	63	62	63	58	51	46	42	40	40	40	40	40	40	40	40	40	40	40	40
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.28	1.06	0.89	0.76	0.66	0.57	0.50	0.45	0.40	0.36	0.32	0.29	0.27	0.24	0.22	0.21
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	115	103	93	85	77	71	66	62	60	60	60	60	60	60	60	60

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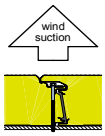
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I-III	1.57	1.35	1.18	1.05	0.94	0.86	0.79	0.73	0.67	0.63	0.59	0.56	0.52	0.45	0.36	0.29	0.23	0.17	0.13				

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.21	1.05	0.94	0.86	0.79	0.74	0.70	0.66	0.61	0.56	0.53	0.49	0.46	0.44	0.42	0.40	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.21	1.05	0.94	0.86	0.79	0.74	0.70	0.66	0.61	0.56	0.53	0.49	0.46	0.44	0.42	0.40	0.38	0.35	0.32	0.29	0.26	0.24	0.21
CG III	1.21	1.05	0.94	0.86	0.79	0.74	0.70	0.66	0.61	0.55	0.42	0.32	0.25	0.20	0.15	0.12							

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.11	1.00	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.55	0.52	0.49	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.11	1.00	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.55	0.52	0.49	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG III	1.11	1.00	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.55	0.49	0.43	0.38	0.33	0.29	0.27	0.24	0.22	0.20	0.18	0.17

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.09	0.99	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.48	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG II	1.09	0.99	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.48	0.46	0.42	0.38	0.35	0.32	0.30	0.28	0.26	0.24
CG III	1.09	0.99	0.91	0.85	0.79	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.46	0.39	0.34	0.29	0.26	0.23	0.20	0.18	0.16	0.15	0.13

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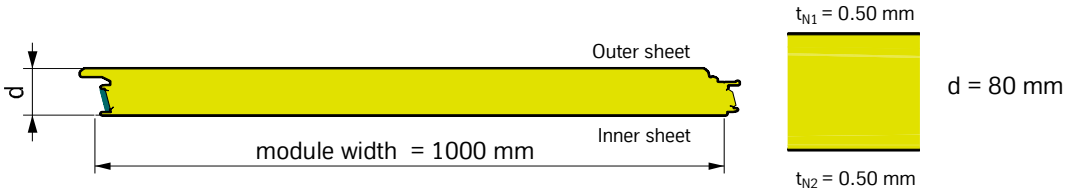
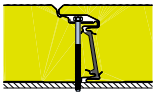
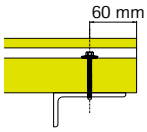
Load tables "permissible q, wind" for preliminary design



Type of fixing



End support: screw with washer d=19 mm
characteristic tensile force Fz,k(b_A) = 2.54 kN



Intermediate support: screw with load distributor
characteristic tensile force Fz,k(b_B) = 5.00 kN

The connection load distributor / supporting structure must be calculated separately!

Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

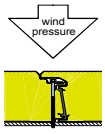
Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	**C**olor **G**roup	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
winter	all	-40 °C

The tables do not replace the structural analysis required for execution of the constructional work. The permissible wind loads in specified [kN/m²] have been determined in accordance with the provisions of official approval no. Z-10.4-345 issued by the German building inspection authorities. The load tables contain both load and material safety factors.

Please note the maximum length supplied, especially in the case of multi-span girders.

Load tables for **wind pressure**



Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.47	0.41	0.36	0.32	0.28	0.24
$b_A \leq$ 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	59	54	49	45	41	40	40	40	40	40	40
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.44	1.33	1.24	1.15	1.08	1.02	0.94	0.81	0.71	0.62	0.54	0.47	0.41	0.36	0.32	0.28	0.24
$b_A \leq$ 80 [mm]	80	80	80	80	80	80	80	80	78	73	68	64	59	54	49	45	41	40	40	40	40	40	40
CG I-III	3.85	3.29	2.88	2.56	2.31	2.09	1.92	1.78	1.61	1.40	1.23	1.09	0.94	0.81	0.71	0.62	0.54	0.47	0.41	0.36	0.32	0.28	0.24

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.34	1.10	0.94	0.83	0.74	0.68	0.63	0.58	0.55	0.52	0.49	0.47	0.45	0.43	0.41	0.40	0.37	0.33	0.29	0.27	0.24	0.22	0.20
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.14	1.04	0.95	0.88	0.82	0.77	0.72	0.68	0.64	0.56	0.48	0.42	0.37	0.33	0.29	0.27	0.24	0.22	0.20
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	74	68	63	60	60	60	60	60	60	60
$b_A \leq$ 80 [mm]	62	62	63	62	62	63	63	63	63	58	51	45	41	40	40	40	40						
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.12	0.92	0.77	0.65	0.56	0.48	0.42	0.37						
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	116	102	91	81	74	68	63	60						

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.48	0.44	0.40	0.37	0.34	0.31
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	73	69	66	63	61
$b_A \leq$ 80 [mm]	62	63	63	62	62	63	63	62	63	63	62	57	53	49	46	43	41	40	40	40	40	40	40
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.11	0.96	0.84	0.74	0.66	0.59	0.53	0.48	0.44	0.40	0.37	0.34	0.31
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	124	114	105	98	92	86	81	77	73	69	66	63	61

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.31	0.29
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.50	0.45	0.41	0.37	0.34	0.31	0.29
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	72	68	64	61	60	60
$b_A \leq$ 80 [mm]	62	62	63	62	62	63	62	62	63	62	61	56	51	47	44	41	40	40	40	40	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.09	0.94	0.82	0.71	0.63	0.56	0.50	0.45	0.41	0.37	0.34	0.31	0.29
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	122	111	102	94	88	82	77	72	68	64	61	60	60

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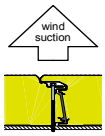
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I-III	1.69	1.45	1.27	1.13	1.02	0.92	0.85	0.78	0.73	0.68	0.63	0.60	0.56	0.53	0.51	0.48	0.46	0.44	0.42	0.40	0.34	0.28	0.24

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.26	1.08	0.96	0.87	0.80	0.74	0.70	0.65	0.60	0.56	0.52	0.49	0.46	0.44	0.41	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29
CG II	1.26	1.08	0.96	0.87	0.80	0.74	0.70	0.65	0.60	0.56	0.52	0.49	0.46	0.44	0.41	0.39	0.37	0.36	0.34	0.33	0.31	0.30	0.29
CG III	1.26	1.08	0.96	0.87	0.80	0.74	0.70	0.65	0.60	0.56	0.52	0.49	0.45	0.36	0.28	0.23	0.18	0.15	0.12				

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.10	0.98	0.90	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.40	0.38	0.36	0.35	0.34	0.32
CG II	1.10	0.98	0.90	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.40	0.38	0.36	0.35	0.34	0.32
CG III	1.10	0.98	0.90	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.54	0.51	0.48	0.46	0.44	0.42	0.38	0.34	0.30	0.28	0.25	0.23

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	4.25	4.50	4.75	5.00	5.25	5.50	5.75	6.00	6.25	6.50	6.75	7.00
CG I	1.06	0.96	0.89	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG II	1.06	0.96	0.89	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG III	1.06	0.96	0.89	0.83	0.78	0.74	0.70	0.66	0.63	0.60	0.57	0.53	0.50	0.47	0.45	0.43	0.38	0.33	0.30	0.26	0.24	0.21	0.19

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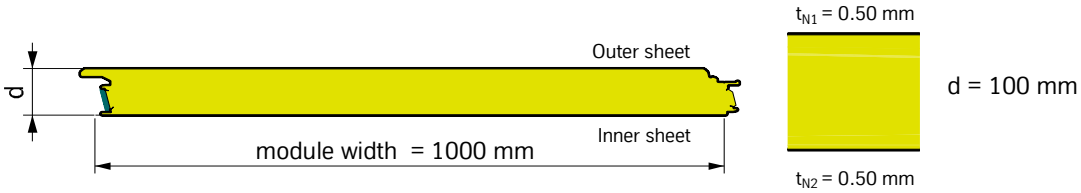
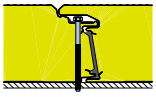
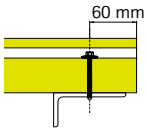
Load tables "permissible q, wind" for preliminary design



Type of fixing



End support: screw with washer d=19 mm
characteristic tensile force Fz,k(b_A) = 2.72 kN



Intermediate support: screw with load distributor
characteristic tensile force Fz,k(b_B) = 4.90 kN

The connection load distributor / supporting structure must be calculated separately!

Line b_A: Minimum end support width b_A in [mm] for the relevant permissible wind-pressure load
Line b_B: Minimum intermediate support width b_B in [mm] for the relevant permissible wind-pressure load

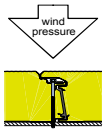
Lines CG I CG II,CG III: Permissible wind load in [kN/m²] with due consideration of the deflection restriction max f = L/100. The following temperature differences between the cover sheets have been taken into consideration for secondary loads in the cover sheets, in accordance with the general approval issued by the building inspection authorities:

Season	**C**olor **G**roup	$t_{outdoor}$-t_{indoor}
summer	I / II / III	+30 / +40 / +55 °C
winter	all	-40 °C

The tables do not replace the structural analysis required for execution of the constructional work. The permissible wind loads in specified [kN/m²] have been determined in accordance with the provisions of official approval no. Z-10.4-345 issued by the German building inspection authorities. The load tables contain both load and material safety factors.

Please note the maximum length supplied, especially in the case of multi-span girders.

Load tables for **wind pressure**



Single-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-III	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.41
$b_A \leq$ 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	57	53	49	46	42
CG I-III	2.88	2.47	2.16	1.92	1.73	1.57	1.44	1.33	1.24	1.15	1.08	1.02	0.96	0.91	0.87	0.82	0.79	0.75	0.69	0.61	0.54	0.49	0.44
$b_A \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	77	73	70	66	63	60	57	53	49	46	42
CG I-III	3.85	3.29	2.88	2.56	2.31	2.09	1.92	1.77	1.65	1.54	1.44	1.36	1.24	1.11	1.00	0.91	0.83	0.76	0.69	0.61	0.54	0.49	0.44

Two-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.29	1.05	0.88	0.77	0.69	0.62	0.57	0.53	0.50	0.47	0.45	0.43	0.41	0.40	0.38	0.37	0.35	0.34	0.33	0.32	0.31	0.29	0.26
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.64	1.40	1.22	1.09	0.98	0.90	0.84	0.78	0.73	0.69	0.66	0.62	0.60	0.57	0.55	0.50	0.44	0.39	0.35	0.32	0.29	0.26
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77	72	68	64	61	60	60
$b_A \leq$ 80 [mm]	62	63	63	63	63	63	62	63	62	62	63	62	56	50	46	42	40	40	40	40	40	40	
CG III	3.00	2.58	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	0.90	0.77	0.66	0.57	0.50	0.44	0.39	0.35	0.32	0.29	
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	125	125	112	101	91	83	77	72	68	64	61	60	

Three-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.43	0.40
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	77
$b_A \leq$ 80 [mm]	63	62	62	63	62	63	62	63	62	62	63	62	63	63	59	55	52	49	47	44	42	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	1.00	0.95	0.85	0.76	0.68	0.62	0.56	0.51	0.47	0.43	0.40
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	125	125	125	125	118	111	104	98	93	89	85	81	77

Four-span girder, permissible wind pressure load perm. w_p [kN/m²]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
b_A = 40 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.44	1.24	1.08	0.96	0.87	0.79	0.72	0.67	0.62	0.58	0.54	0.51	0.48	0.46	0.43	0.41	0.39	0.38	0.36	0.35	0.33	0.32	0.31
b_B = 60 [mm]	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60
$b_A \leq$ 60 [mm]	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
CG I-II	1.92	1.65	1.44	1.28	1.15	1.05	0.96	0.89	0.82	0.77	0.72	0.68	0.64	0.61	0.58	0.55	0.52	0.50	0.48	0.46	0.44	0.40	0.37
$b_B \leq$ 80 [mm]	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	79	75	72
$b_A \leq$ 80 [mm]	62	62	62	63	62	63	63	62	62	62	63	62	63	62	57	53	50	47	44	42	40	40	40
CG III	3.00	2.57	2.25	2.00	1.80	1.64	1.50	1.39	1.29	1.20	1.13	1.06	1.00	0.94	0.83	0.73	0.65	0.59	0.53	0.48	0.44	0.40	0.37
$b_B \leq$ 125 [mm]	125	125	125	125	125	125	125	125	125	125	125	125	125	124	115	107	100	94	88	84	79	75	72

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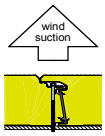
Load tables for **wind suction**



Single-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
CG I-III	1.81	1.55	1.36	1.21	1.09	0.99	0.91	0.84	0.78	0.73	0.68	0.64	0.60	0.57	0.54	0.52	0.49	0.47	0.45	0.44	0.42	0.40	0.39

Two-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
CG I	1.32	1.13	0.99	0.89	0.81	0.75	0.71	0.65	0.60	0.55	0.52	0.48	0.45	0.43	0.41	0.39	0.37	0.35	0.34	0.32	0.31	0.30	0.29
CG II	1.32	1.13	0.99	0.89	0.81	0.75	0.71	0.65	0.60	0.55	0.52	0.48	0.45	0.43	0.41	0.39	0.37	0.35	0.34	0.32	0.31	0.30	0.29
CG III	1.32	1.13	0.98	0.84	0.74	0.67	0.61	0.57	0.53	0.51	0.48	0.46	0.44	0.42	0.41	0.39	0.35	0.29	0.24	0.20	0.17	0.14	0.12

Three-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
CG I	1.11	0.98	0.89	0.83	0.78	0.73	0.70	0.67	0.64	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG II	1.11	0.98	0.89	0.83	0.78	0.73	0.70	0.67	0.64	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32
CG III	1.11	0.98	0.89	0.83	0.78	0.73	0.70	0.67	0.64	0.60	0.56	0.53	0.50	0.47	0.45	0.43	0.41	0.39	0.37	0.36	0.34	0.33	0.32

Four-span girder, permissible wind suction load perm. w_s [kN/m^2]

Span L[m]	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00	4,25	4,50	4,75	5,00	5,25	5,50	5,75	6,00	6,25	6,50	6,75	7,00
CG I	1.04	0.94	0.87	0.82	0.77	0.73	0.70	0.67	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.31
CG II	1.04	0.94	0.87	0.82	0.77	0.73	0.70	0.67	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.31
CG III	1.04	0.94	0.87	0.82	0.77	0.73	0.70	0.67	0.64	0.60	0.56	0.52	0.49	0.47	0.44	0.42	0.40	0.38	0.37	0.35	0.34	0.32	0.29

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